How much muscle mass can the average person gain?

This is an article I've been meaning to write for a long time. What prompted to write it now was a recent article on the former heavy weight champion Evander Holyfield. Before reading this article I had already come to the conclusion that a drug free average size man of average genetics can *at most* gain about 15 pounds of new muscle. To get more specific, a drug free man in his 20's who is 5'9" with a medium sized frame can at most gain about 15 pounds of *new* muscle. How did I come to this conclusion? I looked at many research studies on weight lifters with 3 or more years of experience. I then looked at the lean body mass on the men in these studies and compared it to the lean body mass of an average man. I especially looked for studies where the participants signed affidavits attesting they had never done steroids. The main problem with this method is it may tend to *overestimate* the amount of muscle an average man can gain. That's because men that have stuck to lifting that long are by nature the ones that are more likely to have success at it. Thereby biasing the outcome to favor men with above average genetics. But even with that bias the studies show a lean body mass of about 15 pounds more than the average untrained man. Researchers estimate that about 15% of the population are what they call "high responders". In other words about 15% can gain substantially more muscle that the rest of the population. I also looked at the very few studies done on muscle building that lasted 6 months or longer. In this study (a mix of men and women) the subjects gained about 7 pounds in the first 3 months, but the real shocker was they actually gained next to nothing in the following 6 months! The study was evaluating the effects of different types of supplements (whey, carbs and soy) and divided the subjects into 3 groups. *In all 3 groups* the amount of lean body mass gained between 3 months and 9 months was negligible. Even more surprising, between the 6 month and 9 month mark all 3 groups actually *lost* lean body mass. All 3 groups followed the same pattern. The first 3 months they gained a substantial amount of lean body mass. They next 3 months they gained a small amount of body mass. The last 3 months they all *lost* lean body mass. In fact 2 of the groups actually ended up

with slightly less lean body mass they they had after the first 3 months. The other group (whey protein) ended up with 0.2 kg more (0.44 pounds) than in the first 3 months, but 0.2 kg *less* the the first 6 months. If you take the average gain of the combined groups after 9 months it is *exactly* the same as the average gain of the combined groups after 3 months. Unfortunately, the authors did not break down the amount of mass gained for each sex or even give the percentage of male and females in the study. So it is not possible to estimate the amount of lean body mass gained for men and women separately from this study. The only other study I could find on this that lasted more than 6 months was this study on college women tennis players. They were comparing the difference in a standard weight resistance program and a periodization program over 9 months. The results were very similar to the previous study. The women gained a substantial amount of lean mass in the first 4 months (7.5 pounds and 4.4 pounds for the periodization and standard groups respectively). But after 9 months they actually had a little less fat free mass than at the end of the first 4 months. So once again we see gains stop after substantial initial fat free mass gain.
When looking at studies done for less time the largest gain I found was 12 pounds over 3 months for men. While the aforementioned previous study on women had the highest gain with 7.5 pounds after the first 4 months. However this study on female volleyball players reported a 6 lb lean body mass gain with creatine supplemention in just 10 weeks. So it seems the best estimate for muscle gain for an average man is at most 12 to 15 pounds. While the average women can gain up to 7.5 pounds. This also corresponds with many studies that show men generally gain about twice as much lean body mass as women. If you are taller or have a large frame these numbers could be exceeded. While if you are shorter than average or have a small frame these numbers will be smaller. In addition about 10% of people are considered “no or low” gainers. This group will, of course, also have lower numbers. Also, these numbers are for people in their 20’s. People in their 40’s should expect half of these gains while people in their 50’s even less. This is why it is best to put on as much muscle as you can while your young. Then, if you continue to lift, you can keep much of your gains as you age.
Now if you’ve been reading a lot of bodybuilding and fitness magazines and you think I’m underestimating the amount you can gain, please keep reading:

Now getting back to Evander Holyfield, the article stated the when Evander was 190 pounds (his natural weight) and wanted to move up to

the heavyweight division, he hired Fred Hatfield. Hatfield was a powerlifting champion and authored over 60 books on bodybuilding and powerlifting. In other words one of the top experts in the world on gaining muscle. Hatfield wanted to get Holyfield's weight up to 220 pounds, even though he was one of the most heavily muscled boxing champions in history, Holyfield "only" managed to get to 208 pounds. In other words he "only" gained 18 pounds of muscle. Now Holyfield cannot be considered an average man. He is probably in the top 0.01% of the genetic pool when it comes to athleticism, and is much larger than the average man, both by height and frame size. In addition he had one of the most foremost authorities training him and almost certainly had the best nutrition advice and specially prepared meals for the optimum muscle gaining diet. Not to mention the extreme mental strength that goes along with being a great heavyweight champion and the incentive of winning the heavyweight championship and tens to hundreds of millions of dollars that go along with it. So if someone with all of the advantages noted above can "only" gain 18 pounds of muscle, do you still think an average man can gain more than 12 to 15 pounds?

Now why is this important to know? Because weight resistance is probably the the second best exercise you can do for your health and quality of life (after aerobics). But, when people don't get the results that are promoted by fitness magazines, they are disappointed and stop.

This is a big mistake because as you age you lose muscle and the older you get the harder it is to put muscle on. This leads to decreased mobility and lower quality of life. In addition some studies show a positive correlation between weight training and lower mortality rate. So instead of concentrating just on the changes in body composition weight resistance causes, one should focus on your strength increases and the quality of life increases that accompany it. Research shows that even though, for many, increases in lean body mass stop after about 3 to 4 months, strength increases continue for much longer. And strength is what ultimately improves the quality of life.

Using myself as an example, last year I started doing machine assisted pull-ups. I have never done pull-ups before, though I have done pull-downs, without much success as far as strength gains. Pull-ups are different from pull-downs and are bio-mechanically superior exercise. I started with needing to set the weight at 110 pounds for assistance. After less than a year I'm doing assisted pull-ups with just 10 pounds. A 100 pound increase, *and I turn 65 years old in a few weeks.* My goal is to do 8 reps with no weight. Yet my lean body mass has increased

very little, maybe at most 3 pounds, according to the biometric scale at the gym. **The lesson here is that while you may not be able to significantly increase your lean body mass, especially if your older, you can significantly increase your strength, and that will increase your quality of life and may also increase the length of your life!**

I managed most of this increase using a special technique I came across in research studies which not only is great for increasing your strength, but also has the greatest effect on increasing your metabolic rate (by far) than anything else I've come across. I'll be talking more about this technique in the future.